matter has been inserted. These amendments have been made to place the application in better form for U.S. practice.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #313MC/50926).

Respectfully submitted,

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APPENDIX

IN THE SPECIFICATION

Please amend page 5, fourth full paragraph as follows:

A rolling device according to this invention comprises an outer member and an inner member each having a raceway surface and rolling elements rolling on the raceway surface by rotational or linear movement of the outer member or the inner member in which the outer member and/or the inner member is constituted with at least one kind of titanium alloys of β type titanium alloys, near β type titanium alloys and α + β type titanium alloys.

IN THE CLAIMS

1. (Amended) A rolling device comprising an outer member and an inner member each having a raceway surface and rolling elements interposed between the raceway surface of the outer member and the inner member and rolling on the raceway surface by rotational or linear movement of the outer member or the inner member in which

the outer member and/or the inner member [is constituted with] comprises at least one kind of titanium alloys of β type titanium alloys, near type titanium alloys and α + β type titanium alloys.

2. (Amended) A rolling device as defined in claim 1, wherein the [titanium alloy has a] outer member and/or the inner member has a raceway surface hardness of Hv 400 or more and less than Hv 600.

3. (Amended) A rolling device as defined in claim [2] 1, wherein the outer member and/or the inner member has a core hardness of Hv 420 or more and [have] has an oxygen compound layer at the raceway surface, and the oxygen compound layer comprises titanium oxide containing rutile type TiO_2 and has a thickness of 20 nm or more.

4. (Amended) A rolling device as defined in claim 3, wherein the core hardness of the outer member and/or the inner member is Hv 450 or more and [a] the thickness of the oxygen compound layer comprises titanium oxide containing rutile type TiO_2 is 50 nm or more.

5. (Amended) A rolling device as defined in claim 1, wherein the rolling element [is constituted with] comprises at least one kind of materials of titanium alloys, silicon nitride, silicon carbide, zirconia series ceramics, alumina series ceramics and SIALON series ceramics.

6. (Amended) A rolling device comprising an outer member and an inner member each having a raceway surface, rolling elements interposed between the raceway surface of the outer member and the inner member and rolling on the raceway surface by rotational or linear movement of the outer member or the inner member and a cage for holding the rolling elements in which

the outer member and/or the inner member [is constituted with] comprises one kind of titanium alloys of β type titanium alloys, near β type titanium alloys and α + β type titanium alloy and [the titanium alloy has a] the outer member and/or the inner member has a raceway surface hardness of Hv 400 or more and less than Hv 600 and the cage has a heat conductivity of 20 W/(m·K) or more.

7. (Amended) A rolling device as defined in claim 6, wherein the cage [is constituted with] comprises one kind of materials of copper, tellurium copper, brass, aluminum bronze, phosphorus bronze, nickel silver, cupro nickel and beryllium copper.

8. (Amended) A rolling device comprising an outer member and an inner member each having a raceway surface and rolling elements interposed between the raceway surface of the outer member and the inner member and rolling on the raceway surface by rotational or linear movement of the outer member or the inner member in which

at least one of the outer member, the inner member and the rolling elements [is constituted with] comprises a titanium alloy of β type titanium alloys, near β type titanium alloys and α + β type titanium alloys and the raceway surface of the outer member, the inner member and the rolling elements [which] has [a] an ω phase with the size of the crystal particles of 1 μm or less.

14. (Amended) A rolling device as defined in claim 11, wherein the hard film [is constituted with] comprises at least one kind of materials of TiN, TiC, TiCN, TiAlN, CrN, SiC and diamond-like carbon.

17. (Amended) A rolling device as defined in claim 1, wherein the rolling element [is constituted with] comprises a superhard alloy or cermet.

20. (Amended) A rolling device as defined in claim 1, wherein the rolling element has a surface hardening layer [constituted with] comprising an iron and steel material and has a corrosion resistance on the surface.

21. (Amended) A rolling device as defined in claim 20, wherein the raceway surface hardening layer is formed by applying a chromium diffusion penetration treatment on the surface of a base material [constituting] comprising the rolling element.

22. (Amended) A rolling device as defined in claim 20, wherein the raceway surface hardening layer contains a nitride layer formed by applying a nitridation treatment to the surface of a base material [constituting] comprising the rolling element.

23. (Amended) A rolling device as defined in claim 1, wherein the titanium alloy [is the titanium alloy satisfying] satisfies the condition: $3.7 \leqq (H/E)$ where E (Gpa) represents the Young's modulus and H (Hv) represents the

minimum hardness for the portion from the raceway surface to a depth corresponding to 2/100 to 5/100 for the diameter of the rolling element.

24. (Amended) A rolling device as defined in claim 1, wherein the titanium alloy [is a titanium alloy satisfying] satisfies the condition: $4.0 \leqq (H/E)$ where E (Gpa) represents the Young's modulus and H (Hv) represents the minimum hardness for the portion from the raceway surface to a depth corresponding to 2/100 to 5/100 for the diameter of the rolling element.

26. (Amended) A rolling device as defined in claim 1, wherein the ratio α_2/α_1 between the heat expansion coefficient α_1 of [the titanium alloy] the outer member and the inner member and the heat expansion coefficient α_2 of the rolling element is within a range of 0.4 to 1.3.

29. (Amended) A rolling device as defined in any one of claims 8, 11, 16, 19, 22, 25 and 26 wherein the rolling element [is constituted with] comprises at least one kind of materials of titanium alloys, silicon nitride, silicon carbide, zirconia series ceramics, alumina series ceramics and SIALON series ceramics.

30. (Amended) A rolling device as defined in any one claims 2, 11, 16, 19, 22, 25 and 26 wherein the rolling device further comprises a cage for holding the rolling elements and the cage [is constituted with] comprises one kind of materials of copper, tellurium copper, brass, aluminum bronze, phosphorus bronze, nickel silver, cupro nickel and beryllium copper.